## THE CARRIZO "GOLD" MINE

by

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> Arizona Geological Survey Contributed Report 89-B June, 1989

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Interpretations and conclusions in this report are those of the consultant and do not necessarily coincide with those of the staff of the Arizona Geological Survey

This report is preliminary and has not been edited or reviewed for conformity with Arizona Geological Survey standards

#### **INTRODUCTION**

Herbert E. Gregory (1917) in his classic report on the Navajo Indian Reservation mentions a silver and gold occurrence in the Carrizo Mountains. Gregory did not locate this reported occurrence and there is no other reference to it in the literature. Some old mine workings, once thought to be related to uranium-vanadium prospecting, examined by the author in 1985 are believed to be the so-called Carrizo "gold" mine.

#### HISTORICAL SUMMARY

The following historical summary is taken from Gregory (1917, pg. 140). In 1891 two groups of prospectors, at the request of the Navajos, were removed by the Sixth Cavalry for prospecting in the Carrizo's without permission. The ejected men filed a protest stating that "very valuable deposits of gold and silver had been located".

The Secretary of the Interior appointed a commission to look into these claims. This commission, chaired by General A. McD. McCook, U.S. Army, visited the Carrizo's in May, 1892. General McCook was accompanied by J.C. Allyn, two geologists, and three professional prospectors. During two weeks in the mountains they found small amounts of copper and iron pyrite, but no gold, silver or lead deposits. Eighteen of the most promising samples were assayed; three samples averaged 2.95 ounces of silver and 0.015 and 0.025 ounces of gold per ton. The Commissioner of Indian Affairs then issued a report stating "that the region was barren of metallic wealth and worthless for mining purposes".

In 1901 a party led by Tom Leaden entered the Carrizo's and at the most promising locality, sank a shaft to the depth of 15 feet. All that was encountered was some copper stains on joints near the surface. The following year the shaft was deepened to a depth of 47 feet, and the entire Carrizo's were prospected, but no mineral deposits were located. Additional prospecting in 1907 failed to locate anything of value.

#### LATER DEVELOPMENTS

Records of the Bureau of Indian Affairs, U.S. Department of the Interior, indicate that on May 10, 1921 the Navajo Mining Company leased 80 acres in sections 29 and 30, T. 13 N., R. 5 W., Navajo Baseline and Meridian, Apache County, Arizona. This lease was covered by U.S. Mineral Survey No. 3643. According to old maps showing the Navajo Land Survey, this location would be near Milepost 12 immediately west of Beclabito.

The Bureau of Indian Affairs records also show that in April 1921, some 1,500 pounds of ore were shipped from the lease, for which Navajo Mining Company received \$68.33 (see Appendix). The commodity mined was not listed nor was the destination of the ore. It is very possible that the shipment was made for copper to a smelter at Durango, Colorado. The only known mine workings in the vicinity of Milepost 12, in Apache County are the ones described in this report.

#### PREVIOUS GEOLOGIC INVESTIGATIONS

During the early 1940's the exposures of the Salt Wash Member of the Morrison Formation, around the perimeter of the Carrizo Mountains, were mapped and prospected by geologists of Union Mines Development Corporation, a contractor for the Army's Manhattan Engineer District. Their interest was the uranium resources of the Salt Wash.

A map prepared by Coleman (1944) showed two mine shafts on the Salt Wash approximately three miles west of Beclabito Trading Post (Figure 1). However, no descriptions of these workings were given in the text of Coleman's report.

In the early 1950's the mountains, and surrounding areas were mapped in detail by John D. Strobell, Jr. of the U.S.Geological Survey. Preliminary geologic maps of the 7 1/2' topographic quadrangles were made available to Atomic Energy Commission (AEC) geologists working in the area. These maps were later openfiled as Trace Elements Memorandum (TEM) reports. Several of the 16 quadrangles released as TEM's showed details of the igneous geology of the Carrizo Mountains. Whereas the published map, OM-160, showed only the igneous geology on the perimeter of the Carrizo Mountains.

While the author was employed by the AEC, I noted two mine symbols in a fault zone, in the Salt Wash, on a copy of TEM-425 (Strobell, 1952). These symbols were in the same area as those shown by Coleman. On the published map OM-160 (Strobell, 1956) they were omitted. During his time in the Carrizos (1953-1958) the author never investigated the area of the mine symbols as there was no activity in that area of the Carrizos during the uranium boom.

#### RECENT INVESTIGATIONS

While relocating, and mapping abandoned uranium mines in the Salt Wash Member of the Morrison Formation, south of Beclabito Trading Post, for the New Mexico Bureau of Mines and Mineral Resources, the author noticed a "copper mine" marked on the Provisional, 1982 edition of the 7 1/2 minute Beclabito, New Mexico-Arizona topographic quadrangle (Figure 2). The copper mine was in the same area as the shaft symbols on Coleman's map.

The author, accompanied by Virginia T. McLemore of the New Mexico Bureau of Mines and Mineral Resources, examined the area of the copper mine on May 24, 1985. The workings were mapped and sampled, and some Photographs taken. We believe these workings are those of the Carrizo "gold" mine described by Gregory (1917). In correspondence with J.D. Strobell, Jr. (personal communication, 1986), he stated that his field assistant had mapped the area of the fault and mine symbols shown on TEM-425, and he had never seen the mine workings, and could not comment on our observations.

#### LOCATION

The old mine is located approximately 2.5 miles west of the settlement of Beclabito, New Mexico in Apache County, Arizona (Figure 2). The mine workings

are in SE 1/4, NW 1/4 section 31, T.40 N., R. 31 W. Gila and Salt River, Baseline and Meridian, projected. The ruins of a cabin (Photos 1 and 2), some 500 feet east of the main mine workings, can be reached by a series of rough, dirt roads that leaves New Mexico State Highway 504 about 1.5 miles northwest of Beclabito Trading Post (Figure 2). A trail leads from the cabin to the lower mine workings.

#### **GEOLOGIC SETTING**

The host rocks at this mineralized occurrence are sandstone beds in the upper part of the Salt Wash Member of the Morrison Formation of Jurassic age. A canyon where the mine workings are located has been eroded into the sandstone as the result of a series of small, parallel, normal faults. The fault zone trends N 65° E and can be traced through the canyon for some 2,500 feet. The faults are nearly vertical to an inclination of 81° to the south. Actual displacement across the fault zone could not be determined, but the south side is downdropped.

In the vicinity of the two shafts, copper stains of malachite and some minor azurite coat fractures and are disseminated into the adjacent sandstone. Some dark gray sulfide minerals are also present in the sandstone. The sandstone beds on both sides of the canyon are highly fractured, with the most fractures paralleling the fault zone. This fracture system is especially evident in the collar of the shaft (Photo 7).

Fractures in the small prospect pit east-northeast of the lower shaft, strike N 30° E and the shattering of the rocks indicate another small fault zone.

In the vicinity of the lower shaft the beds of the Salt Wash Member are dipping about 18° to the northeast. In the area between the two shafts the dip has increased to 26°. The increase is due to underlying sills of the Carrizo laccolith.

West of the upper shaft the beds of the Salt Wash Member are intruded by at least 5 separate sills. The sills have intruded along bedding surfaces and reach a maximum thickness of 10 feet. The interbedded Salt Wash units can be up to 20 feet thick. The upper prospect pit is in one of these sandstone units between two of the sills.

No anomalous radioactivity was noted anywhere on the property

#### DESCRIPTION OF THE WORKINGS

The lower shaft is located on the south side of the mouth of a small canyon. Near the shaft are the ruins of some old mine buildings (Photos 3,4,and 6). The shaft is approximately 7 feet square and completely open (Photo 7). A tape dropped down into the shaft indicated a minimum depth of 60 feet. Material removed from the shaft has been used to construct a dump with a loading area (Photo 5). Some 250 feet northeast of this shaft is a small prospect

pit on the north side of the canyon (Figure 3).

Approximately 500 feet up the canyon from the lower shaft is evidence of another shaft, now filled with sediment. This shaft was sunk in the bottom of the canyon. Nearby is a concrete slab that could have been the base for a hoist (Figure 3). Just west of this shaft is the remains of a rock dam (Photos 8 and 9). It appears to have been built for flood control. Immediately east of the upper shaft is the remains of rock and log culvert (Photo 10).

Another 800 feet up the canyon from the upper shaft is a small prospect pit on the north wall of the canyon. This working appears to have been the western most mine symbol shown on TEM-425. A well constructed trail leads from the area of the lower shaft to this west prospect pit (Photos 11 and 12). The trail was built along the north wall of the canyon.

#### **SAMPLES**

Two of the samples collected were analyzed in the laboratories of the New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico. Sample No. 1 was a grab sample from a copper-stained fracture in the floor of the canyon near the upper shaft (Figure 3). Sample No. 4 was a grab of copper-stained sandstone from the pit northeast of the lower shaft (Figure 3).

Sample No	<u>Gold</u>	Silver	<u>Copper</u>	<u>Lead</u>	Zinc	Uranium Oxide	
	Tr	13.32	0.95	< 0.02	0.008	0.002	
4	Tr	89.18	1.84	< 0.02	0.01	0.001	

Gold and silver are in ounces per ton, all other assays are weight percent.

#### REFERENCES

- Coleman, A.H., 1944, A report on the geology and ore deposits of the B'Cla B'Toh (Beclabito) district, Carrizo uplift area, New Mexico-Arizona: U.S. Army, Manhattan Engineer District Report RM0-469, 28p, (Open-Filed by the U.S. Atomic Energy Commission).
- Gregory, H.E., 1917, Geology of the Navajo country, a reconnaissance of parts of Arizona, New Mexico and Utah: U.S. Geological Survey Professional Paper 93, 161 p.
- Strobell, J.D. Jr., 1952, Pastora Peak NE, preliminary geologic map of part of the Carrizo Mountains area, northeastern Arizona, northwestern New Mexico: U.S. Geological Survey Trace Elements Memorandum Report TEM-425, 1 sheet, scale 1:24,000.
  - 1956, Geology of the Carrizo Mountains area in northeastern Arizona and New Mexico: U.S. Geological Survey Oil and Gas Investigations Map OM-160, 2 sheets, scale 1:48,000.

#### APPENDIX

U.S. DEPARTMENT OF INTERIOR, BUREAU OF INDIAN AFFAIRS CORRESPONDENCE CONCERNING THE NAVAJO MINING COMPANY OF THE CARRIZO "GOLD" MINE PROPERTY

#### NAVAJO

#### METALS LEASE/CONTRACT INFORMATION

EXECUTION DATE 04/06/21

Effective					Due	Due Dates		
Date	Lessee	Acres	Rental	Royalty Terms	Rental	Royalties	To	
05/10/21	Navajo Mining Company	80	Per annum Rate per acre	Per cent of net value 5% up to \$	<del></del>	Within 10 days after the close	v.s.	
			1st year - \$ .25	6% up to	40	of each month	Govern- ment	
			2nd year50 3rd year50	•	60 BO			
			4th year50	9% up to 10	00			
}			5th year50 Thereafter - 1.00 See below 2/	10% over 10	0 <b>0</b> ·			

#### LEGAL DESCRIPTION

Section 29 and 30, Twp. 13 N., R.5.W. N.S.B.M., in Apache County, Arizona, Mineral Survey No. 3643, covering 80 acres

#### LEGAL DESCRIPTION

Navajo Mining Claim, Navajo Mining Claim No. 1, Navajo Mining Claim No. 2, Navajo Mining Claim No. 4, continguous claim, situated on the ease slope of the Carriso Mountains in the San Juan District of the Navajo Indian Reservation in the State of Arizona, and covered by Mineral Survey No. 3643, containing 80 acres more or less

Exhibit No. 18 could not be located

Compiled by Bureau of Indian Affairs records by the Indian Trust Accounting Division, Genera Services Administration, 1979.

 $<sup>\</sup>frac{1}{2}$  Exhibit No. 18 - Contract on lease

<sup>2/</sup> Rental - To be credited against any royalties accruing during that year if production begins therein

### HOTICE.

Notice is hereby given that the Mavajo Mining Company, a corporation organized under the laws of Arizona, and claiming to be the successors in interest to Jacob W. Young, Wallace Johnson, J. W. Kelly, N. M. Johnson, E. L. Jensen, Mophi John, son, and Joseph E. Edmonds, in and to certain mining locations on this reservation and in the State of Arizona, and known as Mavajo, Mavajo No. 1, Mavajo No. 2, and Mavajo No. 4, has filed in this office application for a mining lease under the provisions of Section 25 of the Act of June 30, 1919, (Public No. 3).

Notice is further given to the public that any person having any objections to offer why this lease should not be granted as applied for, may present the same in this office on or before July 20th, 1920, and the same will have due consideration.

Every W. Costers
Superintendent.

San Juan Agency, Shiprock, New Mexico July 5, 1920. San Juan Indian School, Shiprock, New Mexico, July 21, 1920.

Commissioner of Indian Affairs, Washington, D. C.

Sir:

I have the honor to transmit herewith communication from L. G. Kelly. Secretary of the Navajo Hining Company, enclosing formal application for a mining lease covering mining claims located on the Carriso Mountain, in the State of Arizons and within the San Juan Reservation. Mr. Kelly submits with his application the following papers:

Certified copy of the Articles of Incorporation of the Navajo Hining Company;

By laws of the Havajo Mining Company;

Affidavit showing authority of the officers to execute the application;

Certificate of the Arizona Corporation Commission, showing full complances with the local Arizona Statutes;

Two copies of the approved platts and two copies of the field notes, covering the survey of the claims;

Certificate of Mary W. Wilkins, County Recorder, Apache County, Arizona, snowing transfer by Quit Claim Deed, to the Mavajo Mining Company.

In addition to the papers submitted by Mr. Kelly there is also enclosed herewith duplicate copies of Notice of Location covering Mavajo Mining Claim, signed by Mephi Johnson, J. W. Kelly, E. L. Jensen, and Wallace Johnson; Motice of Location of Mavajo Mining Claim No. 1, signed by Mephi Johnson, J. W. Kelly, Jacob W. Young, Wallace Johnson, and N. M. Johnson; Motice of Location covering Mavajo Mining Claim No. 2, signed by Mephi Johnson, Wallace Johnson, Jacob W. Young, J.W. Kelly, and N. M. Johnson; Motice of Location covering Mavajo

Mining Claim No. 4. signed by Mephi Johnson, J. W. Rolly, E. L. Jonson, Wallace Johnson, N. M. Johnson, Jacob W. Young, and Jos. Edmonds. With these applications is the curslope in which they were enclosed by the Clark who received them, showing that they were filed in this office November 1, 1919, at 4:40 P. II. There is attached to those Notices of Location notation made by myself showing that J. W. Kelly and Hophi Johnson made these locations and set up the monuments in August, 1919, while they were here waiting for permission to do so. On June 11, 1919, you granted permission to J. W. Kelly and Herhi Johnson, Jr., of Marysville, Utah, to negotiate for a mining lease. (L-C 47575-19 WDW). These men came to the reservation for the purpose of prospecting under this permit. I refused them permission to go on the reservation and wired to you in rogard to the matter. These men were supposed to remain here at the hotel rending your reply, but as I afterwards learned. they proceeded to Carriso Mountain and prospected and set up a monument on the ground, which they really located on Hovember 1, 1919, at about three or four o'clock in the morning. As a matter of fact, J. W. Helly did not come on the reservation at all, and the rerson who represented himself to be J. W. Kelly was in fact, E. L. Jonsen. There is enclosed a letter from L. C. Kelly, dated July 15, 1920, together with carbon copy of my reply thereto, under date of July 19, 1920; report of Mark W. Radcliffe, General Mechanic, dated July 15, 1920, who visited the claims with the map of location made by Harry E. Jones, United States Mineral Surveyor, of Phoenix, Arizona; copy of notice posted by me allowing protest to be filed up to and inclading July 20, 1920.

lir. Jacob W. Young originally came to the reservation as a mining engineer and has been on the ground more or less continuously since October 31, 1919. Most of my discussion of matter pertaining to mining leases has been with Mr. Young. In this connection I invite your attention to the following sentence in Mr. Kelly's letter of Jung 24, 1920. "I have incorporated in the lease the suggestions which you made to Mr. Young while he was there." These suggestions were a 12-1/2% royalty and the insertion of a clause in the lease which would give the Secretary of the Interior authority to limit the salaries which might be paid to the officers of the corporation which might be paid to the officers of the corporation which might take over these claims, it having been made very clear to me that it was the intention of these men to organize a corporation for the

purpose of taking over and handling these claims. I discussed very freely with Mr. Young the fact that the corporation could pay such salaries to its officers and stockholders as to entirely eliminate any royalty coming to the Mavajo Indians from this source. You will observe that while Mr. Welly says he has "incorporated in the lease the suggestions which you made to Mr. Young", that he has not done so, and has not filed with me any lease whatever. I do not know of any reason why he should have omitted this very essential part, for the reason that Mr. Young was furnished with the necessary blanks for executing the lease.

Attention is invited to the fact that application for lease covers claims known as Marajo, Marajo No. 1, Marajo No. 2, and Havajo No. 4. The map enclosed shows Havajo No. 3, Havajo No. 5, end Mavajo No. 6, unsurveyed. Under date of November 11, 1919, Erven L. Jensen and Jos. Edmonds filed a protest in this office against "the actions of other prospectors and locators" staking claims and discovery monuments on mining claims made by them, especially protesting against such action by J. E. Reese, H. H. Irwin, and Charles A. Brothers, who, it is claimed, performed such act on laims 1, 2, 3, and 4. In order to make their protest very sweeping they entered protest against any other locators who have, or may file claims upon such mining claims. So far as I am awars, neither Mr. Jensen nor Mr. Edmonds, nor any of the persons interested in the present application have any interest in the Havajo Claim No. 3. At any rate No. 3 is not involved in the present report. Heither Mr. Reese, Mr. Irwin, nor Er. Brothers, or in fact any other person, has filed any objections to the granting of a lease to this company.

The attention of the Office is invited to the fact that the Mavajo Mining Company is a corporation organized under the laws of Utah, although the location of the property is in Arizona. It also appears by the record that Mephi Johnson, Kelly, Toung, and the other original locators have conveyed to this corporation by deed all the "rights, lands, mining claims, and property containing gold, silver, lead, copper, and other precions metals". All that any of these men had to convey at the timo this deed was made was a right to prospect on the reservation. Even if they had a lease on the land they would have no right to convey by deed any "lands, mining cliams, and property". On July 6, 1920, four "Mey York financiers", together with a mining engineer from Salt Lake City came to the reservation and spent the seventh, eighth, and minth day of

the present month in going over these claims. About nine thirty Friday evening July 9th, Er. Young came to my house and incisted that I forward their applications to your Office immediately, and was very much peeved that I had given any notice of the fact that they had made application for a The New York financiers and the Salt Lake engineer leaso. did not call on me after their visit to the claims and only for a few minutes on the evening of July 6th. Er. Young gave me no intimation of what the result of this visit was. Other people have stated that the New York men were to become purchasers of 60% of the capital stock of this company. Ly personal opinion is that they have intimated in no way what action they will take, but it is perfectly evident that the members of the corporation are trying to sell their interest in these claims. The company was incorporated for a million shares, but I am advised informally and unofficially. that the Corporation Commission of Utah or Prizona materially reduced the amount of stock in the corporation and the amount allowed to each of the locators. ....

The attention of the Office is invited to your files relating to this matter as follows: 34739-19, 17247-20. The telegram from your Office to J. W. Kelly and Rephi Johnson in August appears to have been turned over to them. At least I am unable to locate it in my files.

I visited the four claims in question, and went over the entire tract of land. I am able to state that there is no living stream of water and are no springs involved in the claims, no Indian residences or enclosures of any kind. In fact, the lend involved is the side of a mountain mostly rock, and a little scrub timber. It has no value to the Indians as a farming proposition, very little for grazing purposes, and none of the timber on it is of any commercial value. If the record is satisfactory to the Office, I see no objections to the granting of the lease, if a 12-1/2% clause is inserted, and if a clausesis inserted in the lease which will prevent the absorption of any royalty by the payment of excessive salaries to officers of the corporation. Personally, I dislike to see leases made to corporations, for the reason that I feel sure the claims have no commercial value as a mining proposition, and the stock selling part is going to be hard to explain to our I ndians.

Unless the corporation has filed the lease in your Office direct, it will be necessary for you to refer a properly drawn lease to ir. Kelly for execution. The entire record is enclosed herewith and whatever action the wisdom of the Department mayesee fit to take will be satisfactory to me.

Very respectfully,

Superintendent.

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The Monorable

The Secretary of the Interior.

Sir:

There is inclosed a letter from the Superintendent of the Ean Juan Indian recervation forwarding for consideration the application of the Mayajo Mining Company for a lease covering the following metalliferous minoral mining claims located on the Lam Juan reservation under the provisions of Section 28 of the Ect of June 30. 1919 (41 Stat. L. 14):

Mame of Claim	Located By				
Ravajo	( Rephi Johnson ( J. V. Melly ( E. U. Jenson ( Walluce Johnson				
Eavajo No. 1	Mophi Johnson J. W. Kelly Jacob W. Young Wellace Johnson U. M. Johnson				
Ravajo No. 2	( Hephi Johnson ( Wulluca Johnson Jucob W. Young J. W. Eelly ( N. L. Johnson				
Navajo No. 4	Nophi Johnson J. W. Holly E. L. Jonson Wellage Johnson H. H. Johnson Jeoob W. Young Joseph Edmonds				

All of the locators have by quitelaim deed conveyed their interests in these claims to the Nevejo Mining Company (see certificate of the County hecorder of Apeche County, Arizona).

The Superintendent went over the entire tract of land covered by the claims, and states that there is no living stream of water, no springs, no Indian residences or enclosures of any kind on the claims, and that the land involved is on the side of a mountain, mostly rocky with some sorub timber. He further states that the land has no value to the indians as a farming proposition, very little for grazing purposes and none of the timber on it is of commercial value.

No conflicting locations have been made on these claims. At the time the application for lease was filed, the Superintendent posted a notice (copy herewith) to the effect that any person having any objections to the granting of a lease to the Navajo Mining Company should file same in his effice. No protests were received.

It will be noted that the Superintendent has attached a note to the location notices stating that "John W. Helly and Rephi Johnson are (sooners' and made locations and set up monuments on this ground in August while waiting for permission to do so." The location notices show that the claims were located on Rovember 1, the day of the opening, and it is not believed that the application for lease should be unfavorably considered on account of the fact that two of the locators were on the reservation prior to the date of opening.

It is therefore recommended that the application of the Havujo Hining Company covering the four claims mentioned above, be approved, the applicant

to be allowed thirty days from the date of notification of approval within which to complete and file a lease covering each claim with the Superintendent of the Lan Juan Indian reservation.

Respectfully,

Assistant Commissioner

DEPARTMENT OF THE ISTERIOR Office of the Secretary.

OCT 1 3 1820

APPROYED:

(Signor) S. G. Hopkins

Assistant Secretary.

# NAVAJO RESERVATION Metalliferous Receipts

#### NAVAJO MINING COMPANY

_		Total Value	Net Value (for Royalty)	Royalty (12.5%)	Official Receipt			
Date	Pounds of Ore				Number	Date ———	Amount	Footnote
11/20/20					132604	11/27/20	\$21.00	1
4/21/21	1,500	\$68.33	\$68.33	\$8.54	132686	4/27/21	\$8.54	2
5/22/22					260716	5/24/22	\$40.00	3
5/23/23					469840	5/5/23	\$40.00	4
TOTAL	1,500	\$68.33	\$68.33	\$8.54	\$109.54			

<sup>&</sup>lt;sup>1</sup>Advance annual rental on the following mining claims: Navajo, Navajo No. 1, Navajo No. 2, and Navajo No.

Compiled from Bureau of Indian Affairs records by the Indian Trust Accounting Division, General Services Administration, May 13, 1979.

<sup>&</sup>lt;sup>2</sup>This royalty was paid prior to the approval of the contract. According to the contract the royalty would have been \$5.47 which would have been offset by the advance rental.

 $<sup>^3{\</sup>rm Second}$  year's advance payment of rental -- 80 acres at  $0.50/{\rm acre}$ .

Third year's advance payment of rental -- 80 acres at \$0.50/acre.

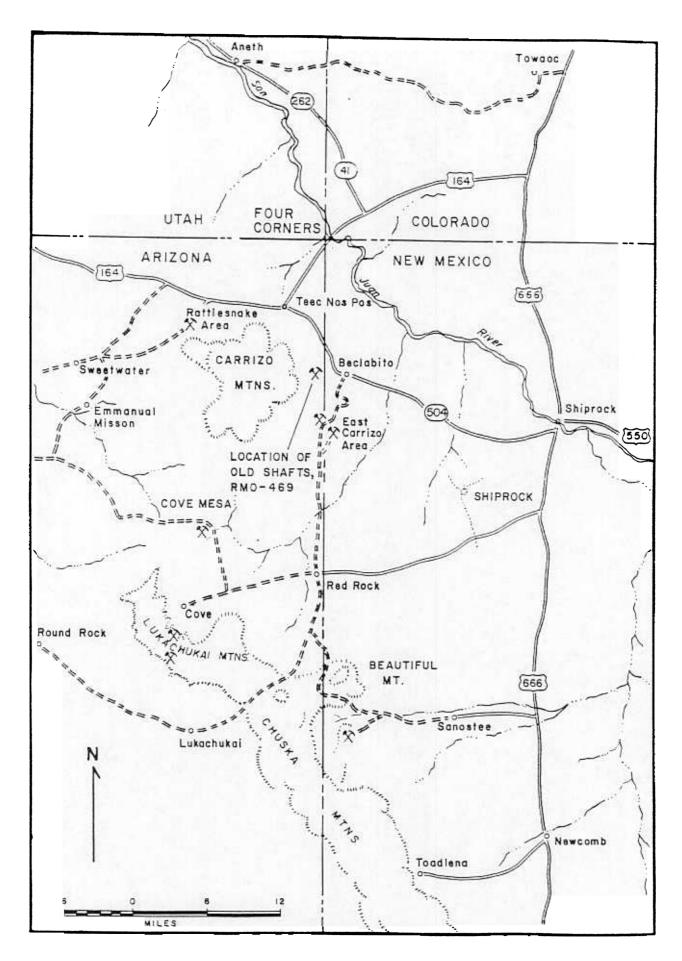


Figure Index map of the Four Corners area showing the location of the principal uranium mines

# FIGURE 3 SKETCH OF CARRIZO MOUNTAIN "GOLD" MINE APACHE CO., ARIZONA

SE 1/4 NW 1/4 SEC. 31 T40N R3IE (PROJECTED)

WLC VTM

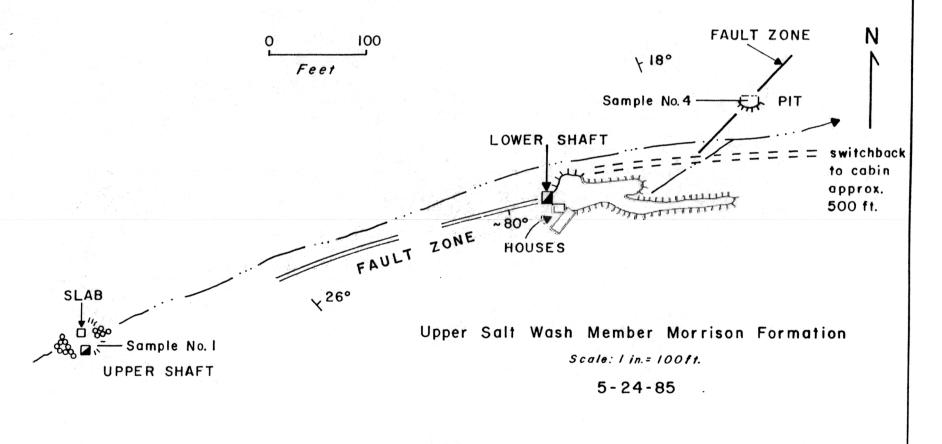




Photo Rui cabi theast shaft



Photo West wal cabi

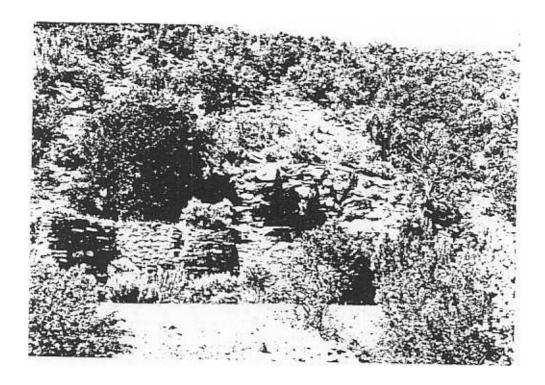


Photo 3, Walls of buildings near shaft

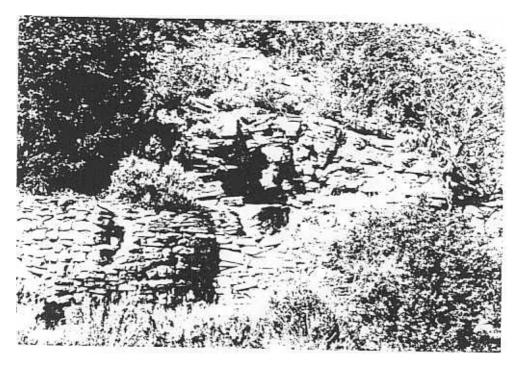
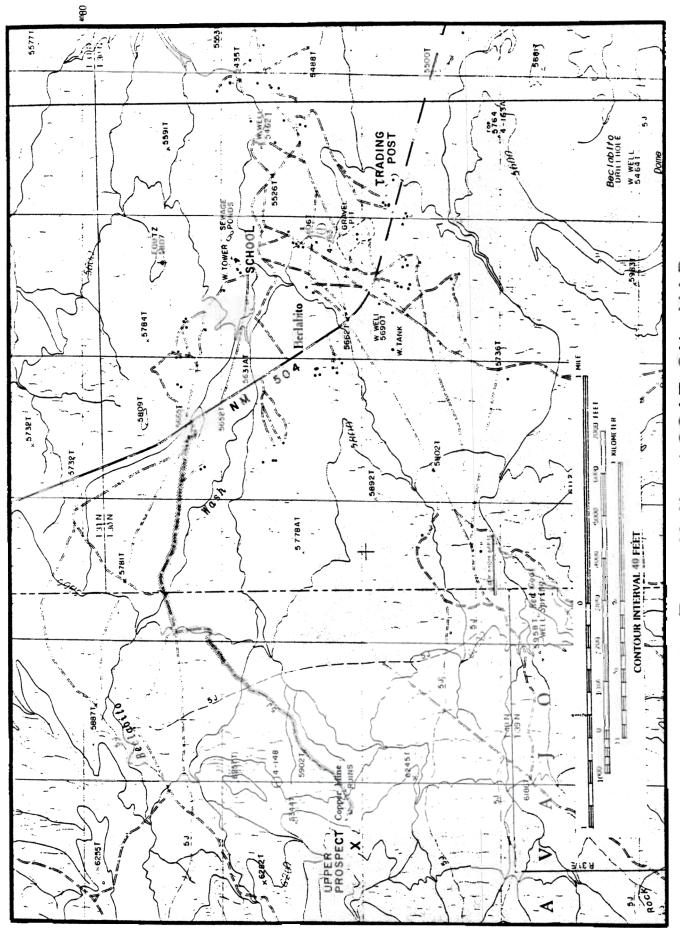


Photo 4, Walls of buildings near shaft.



F GURE 2 M N LOCAT ON MAP



Photo 5, Looking south at old dump at shaft.



Photo 6, Looking south at buildings. Shaft is to the right of center on lower edge of photo.

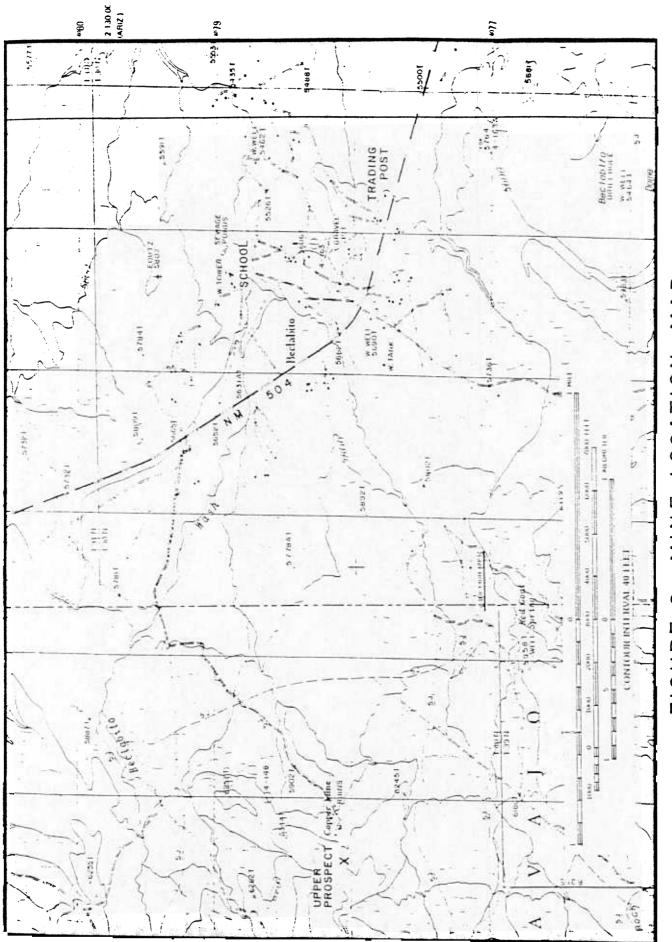


FIGURE 2 MINE LOCATION MAP
ACCESS ROUTE O CARRIZO "GOLD" MINE



Photo 9 Rock dam in canyon at upper shaft location

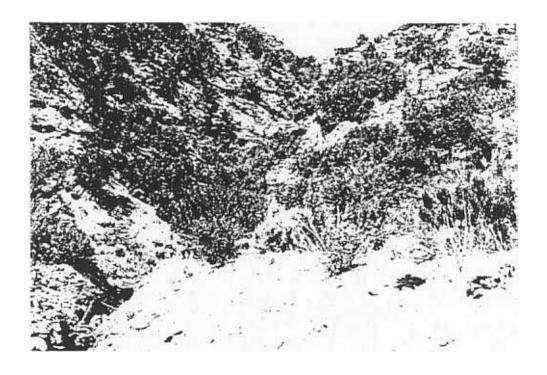
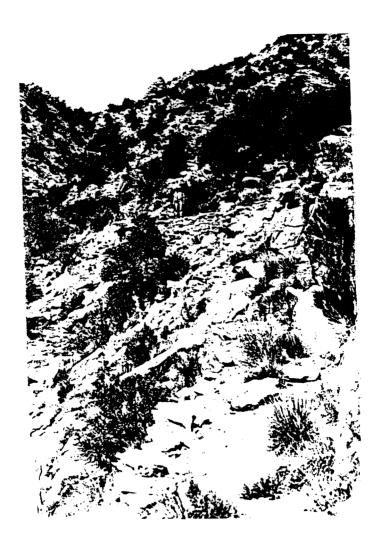


Photo 10, View southwest up canyon from near upper shaft Note old culvert in lower left corner, and person standing at shaft location.





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